

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-30. canceled

31 (currently amended). A method of generating enhanced images of a human or non-human animal body which comprises administering to said body an agent as claimed in claim 1 and generating an ultrasound, magnetic resonance, X-ray, radiographic or light image of at least a part of said body, wherein said agent comprises a suspension in an aqueous carrier liquid of a reporter comprising gas-containing or gas-generating material, said agent being capable of forming at least two types of binding pairs with a target.

32 (previously presented). A method as claimed in claim 31 which comprises the steps:

i) administering to said body a pre-targeting vector having affinity for a selected target; and thereafter

ii) administering an agent, said agent comprising a vector having affinity for said pre-targeting vector.

33 (original). A method as claimed in claim 32 wherein said pre-targeting vector comprises a monoclonal antibody.

34 (previously presented). A method as claimed in claim 31 which comprises the steps:

i) administering to said body an agent; and thereafter
ii) administering a substance capable of displacing or releasing said agent from its target.

35 (previously presented). A method as claimed in claim 31 wherein said agent further comprises a therapeutic compound.

36 (original). A method as claimed in claim 35 wherein said therapeutic compound is covalently coupled or linked to the reporter through disulphide groups, and a composition comprising a reducing agent capable of reductively cleaving said disulphide groups is subsequently administered.

37-38. cancelled.

39 (new). A method as claimed in claim 31 wherein the gas comprises air, nitrogen, oxygen, carbon dioxide, hydrogen, an inert gas, a sulphur fluoride, selenium hexafluoride, a low molecular weight hydrocarbon, a ketone, an ester, a halogenated low molecular weight hydrocarbon or a mixture of any of the foregoing.

40 (new). A method as claimed in claim 39 wherein the gas comprises a perfluorinated ketone, perfluorinated ether or perfluorocarbon.

41 (new). A method as claimed in claim 39 wherein the gas comprises sulphur hexafluoride or a perfluoropropane, perfluorobutane or perfluoropentane.

42 (new). A method as claimed in claim 31 comprising gas microbubbles stabilised by a coalescence-resistant surface membrane, a filmogenic protein, a polymer material, a non-polymeric and non-polymerisable wall-forming material or a surfactant.

43 (new). A method as claimed in claim 42 wherein said surfactant comprises at least one phospholipid.

44 (new). A method as claimed in claim 43 wherein at least 75% of the said surfactant material comprises phospholipid molecules individually bearing net overall charge.

45 (new). A method as claimed in claim 44 wherein at least 75% of the film-forming surfactant material comprises one or more phospholipids selected from phosphatidylserines, phosphatidylglycerols, phosphatidylinositols, phosphatidic acids and cardiolipins.

46 (new). A method as claimed in claim 45 wherein at least 80% of said phospholipids comprise phosphatidylserines.

47 (new). A method as claimed in claim 31 wherein said gas-containing or gas-generating material is conjugated to at least two vectors or to one vector capable of binding to at least two binding sites.

48 (new). A method as claimed in claim 47 wherein said gas-containing or gas-generating material is conjugated to one or more targeting vectors having specificity for one or more cellular surface receptors and further comprises moieties capable of binding to a receptor system so as to induce a therapeutic response.

49 (new). A method as claimed in claim 47 wherein the vector or vectors are selected from antibodies; cell adhesion molecules; cell adhesion molecule receptors; cytokines; growth factors; peptide hormones and pieces thereof; non-bioactive binders of receptors for cell adhesion molecules, cytokines, growth factors and peptide hormones; oligonucleotides and modified oligonucleotides; DNA-binding drugs; protease substrates/inhibitors; molecules generated from combinatorial libraries; small bioactive molecules; and proteins and peptides which bind to cell-surface proteoglycans.

50 (new). A method as claimed in claim 47 wherein the vector or vectors have affinity for targets at a level such that the agent interacts with but does not fixedly bind to said targets.

51 (new). A method as claimed in claim 50 wherein the vector or vectors are selected from ligands for cell adhesion proteins and cell adhesion proteins which have corresponding ligands on endothelial cell surfaces.

52 (new). A method as claimed in claim 47 wherein the vector or vectors are sited such that they are not readily exposed to the target.

53 (new). A method as claimed in claim 47 wherein the vector or vectors are coupled or linked to the reporter by means of avidin-biotin and/or streptavidin-biotin interactions.

54 (new). A method as claimed in claim 47 wherein the vector or vectors may be covalently or non-covalently coupled or linked to the reporter.

55 (new). A method as claimed in claim 47 wherein the vector is coupled or linked to the reporter by means of electrostatic charge interaction.

56 (new). A method as claimed in claim 31 which further contains moieties which are radioactive or are effective as X-ray contrast agents, light imaging probes or spin labels.

57 (new). A method as claimed in claim 31 further comprising a therapeutic compound.

58 (new). A method as claimed in claim 57 wherein said therapeutic compound is an antineoplastic agent, blood product, biological response modifier, antifungal agent, hormone or hormone analogue, vitamin, enzyme, antiallergic agent, tissue factor

inhibitor, platelet inhibitor, coagulation protein target inhibitor, fibrin formation inhibitor, fibrinolysis promoter, antiangiogenic, circulatory drug, metabolic potentiator, antitubercular, antiviral, vasodilator, antibiotic, antiinflammatory, antiprotozoan, antirheumatic, narcotic, opiate, cardiac glycoside, neuromuscular blocker, sedative, local anaesthetic, general anaesthetic or genetic material.

59 (new). A method as claimed in claim 57 wherein said therapeutic compound is covalently coupled or linked to the reporter through disulphide groups.

60 (new). A method as claimed in claim 57 wherein a lipophilic or lipophilically-derivatised therapeutic compound is linked to the reporter through hydrophobic interactions